

PLC BASIC SIMULATOR

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ABSTRACT

In this final year project, this project was designed based on the idea of the PLC system. Programmable Logic Controller (PLC) is common process controller used in the industry area. The PLC is also considered as a specific computer that capable of performing many functions automatically. In study of electrical, the students will learn about the PLC system. But most of the students don't know how to apply the PLC system in real life. Thus, in this project helps the users apply the basic knowledge of PLC in PLC Basic Simulator.

The mnemonic code is a programming language in PLC. The code depends on the PLC used but normally from one PLC to another there is not much difference. If the students are an expert in developing a programmer using one type of PLC, it is not difficult to understand the programming concept of any other PLC. This project is based on mnemonic structure of coding PLCs for the students will know how to use the PLC in real life. This project mainly describe about how to enable the users to read and understand the Programmable Logic Controller (PLC).

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CHAPTER 1

INTRODUCTION

1.1 Background Study

Programmable Logical Controller (PLC) is one of the famous automation process controller used all over the world. It is mainly apply in control of machinery on factory assembly line, quality control line or light fixtures for more economy operational cost.

Programmable Logical Controller (PLC) is famous because of its flexibility and user friendly mnemonic programming language. This device is also considered as a specific computer that is capable of performing many functions automatically. In study of electrical and electronics engineering, students will study about PLC system. Therefore, this project helps the users apply the knowledge of PLC in PLC Basic Simulator. The programming of logic controllers has been done majorly by the knowledge of the programmer and no formal methods are used. Hence, the task of writing the code becomes a difficult one with the efficiency of the code varying from programmer to programmer. The mnemonic structure of coding PLCs makes it difficult to realize higher level concepts such as function calls and looping. Therefore, the users need to expert in PLC system first. Then the users will know how to use the PLC in real life.

It is clear that if want to know the status or data of automation process, will need to hire someone who able to access and read Programmable Logical Controller (PLC) mnemonic code just to obtain the data we want from Programmable Logical